AMENDMENTS TO THE CLAIMS:

The listing of claims will replace all prior versions, and listings of claims in the application:

LISTING OF THE CLAIMS

- 1. (Currently Amended) A method of producing a bone substitute material in the form of a block predominantly composed of carbonate apatite for medical use, which comprises the step of forming carbonate apatite by contacting a block of calcium compound with a phosphate-containing solution, wherein said calcium compound block contains substantially no powders such that powders with a diameter of 20 micrometers or smaller are less than 1.0% by weight of said calcium compound block, wherein at least one of said calcium compound block and said phosphate solution contains a carbonate group, and wherein the method does not include any sintering step.
- 2. (Original) The method of producing a bone substitute material for medical use as claimed by claim 1, wherein the block of calcium compound is one prepared using an artificially synthesized calcium compound.
- 3. (Original) The method of producing a bone substitute material for medical use as claimed by claim 2, wherein the calcium compound block prepared using an artificially synthesized calcium compound is a foamed calcium compound.
- 4. (Currently Amended) A bone substitute material produced by a method comprising forming carbonate apatite by contacting a block of calcium compound with a phosphate-containing solution, wherein said calcium compound block contains substantially no powders <u>such that powders with a diameter of 20 micrometers or smaller are less than 1.0% by weight</u>, wherein at least one of said calcium compound block and said phosphate solution contains a carbonate group, and wherein the method does not include any sintering step, and wherein the bone substitute material is

predominantly composed of carbonate apatite with carbonate group content of 0.5% or more by weight.

- 5. (Previously Presented) A bone substitute material as claimed in claim 4, wherein the block of calcium compound is one prepared using an artificially synthesized calcium compound material.
- 6. (Previously Presented) A bone substitute material claimed in claim 4, wherein the calcium compound block prepared using an artificially synthesized calcium compound is a foamed calcium compound.
- 7. (Previously Presented) The method of producing a bone substitute material for medical use as claimed in claim 1, wherein the contacting of the block of calcium compound with the phosphate-containing solution comprises immersing the block in the phosphate-containing solution.
- 8. (Previously Presented) The method of producing a bone substitute material for medical use as claimed in claim 3, wherein the porous block has an average pore diameter in a range of 50-1000µm.
- 9. (Previously Presented) A method of producing a bone substitute material predominantly composed of carbonate apatite, comprising:

providing a porous body formed of a calcium compound, the body containing substantially no powders and having an average pore diameter in a range of 50-1000µm;

contacting the porous body with a phosphate-containing solution, at least one of said porous body and said phosphate solution containing a carbonate group, whereby the porous body is predominantly composed of carbonate apatite; and

wherein the method does not include any sintering step.

10. (New) The method of producing a bone substitute material for medical use as

claimed by claim 1, wherein said calcium compound block contains substantially no powders such that powders with a diameter of 20 micrometers or smaller are less than 0.8% by weight.